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FastDB - Past Pairwise Comparison of Sequences  
Release 5.4

Results file us-10-006-130a-129.res made by tport on Fri 20 Feb 104 15:36:33-PST.

Query sequence being compared: US-10-006-130A-129 (1-2213)  
Number of sequences searched: 409  
Number of scores above cutoff: 409

Results of the initial comparison of US-10-006-130A-129 (1-2213) with:  
File : 655174.seq  
File : US0937406A.seq

The scores below are sorted by initial score.  
Significance is calculated based on initial score.  
A 100% identical sequence to the query sequence was not found.

The list of best scores is:

Sequence Name	Description	Length	Score	Init. Score
US-09-374-046A-3	Sequence 3, Application U	3508	1731	**** 18 standard deviations above mean ****
US-0937406A.seq	Sequence 10, standard deviations above mean ****	3508	1731	**** 10 standard deviations above mean ****

Query sequence being compared: US-10-006-130A-129 (1-2213)  
Number of sequences searched: 409  
Number of scores above cutoff: 409

Results of the initial comparison of US-10-006-130A-129 (1-2213) with:  
File : 655174.seq  
File : US09374046A.seq

Number of scores above cutoff:	409
The scores below are sorted by initial score.	
Significance is calculated based on initial score.	
The list of best scores is:	
Sequence Name	Description
	Length Score Significance
1. US-09-374-046A-3	Sequence 3, Application U
2. US-09-205-258-20	Sequence 200, Application 1707
US-10-006-130A-129	(1-2213)
US-09-374-046A-3	Sequence 3, Application US/09374046A
Initial Score = 1731	Optimized Score = 2150
Residue Identity = 95%	Matches = 2204
Gaps = 106	Substitutions = 2204
X 10 20 30 40 50 60	Mismatch
X 10 20 30 40 50 60	Significance
80 90 100 110 120 130	
GCGAGCTTCCTCAGCCCTTGCGGCTTGCGCTCTGCTGACCACTGGTGTGGCC	
GCGAGCTTCCTCAGCCCTTGCGGCTTGCGCTCTGCTGACCACTGGTGTGGCC	
80 90 100 110 120 130	
150 160 170 180 190 200	
AATGGAATCACAAAGACCTGTATAAGGATGATGGAGACAAGTTCCCTGCCTGTC	
AATGGAATCACAAAGACCTGTATAAGGATGATGGAGACAAGTTCCCTGCCTGTC	
150 160 170 180 190 200	
220 230 240 250 260 270	
GAAATTACTCCGTTATCGTCATGTTCACTGCTCCAACTGCTAGCTGCTGTC	
GAAATTACTCCGTTATCGTCATGTTCACTGCTCCAACTGCTAGCTGCTGTC	
220 230 240 250 260 270	
290 300 310 320 330 340	
ATGAGAAATCCGATCCGCAAACCTCTGGCGATACTCCAGTGATGTTTCAGG	
ATGAGAAATCCGATCCGCAAACCTCTGGCGATACTCCAGTGATGTTTCAGG	
290 300 310 320 330 340	
370 380 390 400 410 420	
TGGCTGGATTTGATGAAAGGCTCTGATGTTTCAGATGGTAAACATGATTTCACT	
TGGCTGGATTTGATGAAAGGCTCTGATGTTTCAGATGGTAAACATGATTTCACT	
370 380 390 400 410 420	
440 450 460 470 480 490	
TTCCCTGCAAAAGGAAACCACCAAAAGGGCTGATACATATGAGTTACAGGTCAT	
TTCCCTGCAAAAGGAAACCACCAAAAGGGCTGATACATATGAGTTACAGGTCAT	
370 380 390 400 410 420	
440 450 460 470 480 490	
510 520 530 540 550 560	
TTGCCCTGGCTGATCCCGACAGAACCTGAGTCATATGAGTTACAGGTCAT	
TTGCCCTGGCTGATCCCGACAGAACCTGAGTCATATGAGTTACAGGTCAT	
510 520 530 540 550 560	

510 520 530 540 550 560 570  
 580 590 600 610 620 630 640  
 TTATCTTGGGATTGGCTTGGCTGTATTGCGGACTCTGGTATTCGAGAGGTAAATGGRATTTCCT  
 TTATGGGATTGGCTTGGCTGTATTGCGGACTCTGGTATTCGAGAGGTAAATGGRATTTCCT  
 580 590 600 610 620 630 640  
 1440 1450 1460 1470 1480 1490 1500  
 CTACATAGGAATTCACTTCTAGCTCTTCATCTTGATGTTAGCTTACCTTCTGCCTTCTGTTTG  
 CTACATAGGAATTCACTTCTAGCTCTTCATCTTGATGTTAGCTTACCTTCTGCCTTCTGTTTG  
 1450 1460 1470 1480 1490 1500 1510  
 1520 1530 1540 1550 1560 1570 1580  
 ATGAGAATAATTGTTGCTGTGTTGCTGTTGCTGTTGCTGTTGCTGTTGCTGTTGCTGTTGCTGTT  
 ATGAGAATAATTGTTGCTGTGTTGCTGTTGCTGTTGCTGTTGCTGTTGCTGTTGCTGTTGCTGTT  
 1520 1530 1540 1550 1560 1570 1580  
 1590 1600 1610 1620 1630 1640 1650  
 TCAAGAACAGTGTGTTCTCTGTTGAGACGGTCTGCTGAGACAGGGAGATTCGAGCTGAGCC  
 TCAAGAACAGTGTGTTCTCTGCTGAGACGGTCTGCTGAGACAGGGAGATTCGAGCTGAGCC  
 1590 1600 1610 1620 1630 1640 1650  
 -----  
 730 740 750 760 770 780 790  
 ATATAGGACCAACATGCCATAAGATCCACAGGGACATGGAAATTATATCATGAAAGGTC  
 ATATAGGACCAACATGCCATAAGATCCACAGGGACATGGAAATTATATCATGAAAGGTC  
 730 740 750 760 770 780 790  
 800 810 820 830 840 850 860  
 AAGCCAGTTGTAACCTGAAACACATGTTCTGACATGGATTGGGAGTACCTTAGGGATGGTCTT  
 AAGCCAGTTGTAACCTGAAACACATGTTCTGACATGGATTGGGAGTACCTTAGGGATGGTCTT  
 800 810 820 830 840 850 860  
 870 880 890 900 910 920 930  
 TATGTAAGGTGTTGCTGTACCTCTGACATGGATTGGAAAGGAAAGATAATTGTTGCTGTTGGT  
 TATGTAAGGTGTTGCTGTACCTCTGACATGGATTGGAAAGGAAAGATAATTGTTGCTGTTGGT  
 870 880 890 900 910 920 930  
 890 900 910 920 930  
 940 950 960 970 980 990 1000  
 TTGTTATTCTTCACTTGTGTTGCTATTAGCTTAATATCTGGTACCCATACAGCTTCTG  
 TTGTTATTCTTCACTTGTGTTGCTATTAGCTTAATATCTGGTACCCATACAGCTTCTG  
 940 950 960 970 980 990 1000  
 950 960 970 980 990 1000  
 1010 1020 1030 1040 1050 1060 1070  
 TGAGTTAAAGGTCCAGGATATAAGACCTGGAGFACTGGAAATTGAAACGAAATCTGGTGT  
 TGAGTTAAAGGTCCAGGATATAAGACCTGGAGFACTGGAAATTGAAACGAAATCTGGTGT  
 1010 1020 1030 1040 1050 1060 1070  
 1090 1100 1110 1120 1130 1140 1150  
 TGAAAAGAAGATGCACTCTATATTGTTATTGTTATTGTTATTGTTATTGTTATTGTT  
 TGAAAAGAAGATGCACTCTATATTGTTATTGTTATTGTTATTGTTATTGTTATTGTT  
 1090 1100 1110 1120 1130 1140 1150  
 1160 1170 1180 1190 1200 1210 1220  
 TTAAACCAAAGAAGATGTTAGTGGCCTTAACAGGCAATCTGTAATTCTGGTTGAAATTATA  
 TTAAACCAAAGAAGATGTTAGTGGCCTTAACAGGCAATCTGTAATTCTGGTTGAAATTATA  
 1160 1170 1180 1190 1200 1210 1220  
 1230 1240 1250 1260 1270 1280 1290  
 TCCTCTTAACCTTCTTCCCAGTGTAACTTGTGAAACATTGTTGAAATTGTTGAAATTATA  
 TCCTCTTAACCTTCTTCCCAGTGTAACTTGTGAAACATTGTTGAAATTGTTGAAATTATA  
 1230 1240 1250 1260 1270 1280 1290  
 1300 1310 1320 1330 1340 1350 1360  
 TTGTAAAAACTACTTGTGTTAGTTGAAACAAAGCTCAAACACTTGTGAACTTGTGTT  
 TTGTAAAAACTACTTGTGTTAGTTGAAACAAAGCTCAAACACTTGTGAACTTGTGTT  
 1300 1310 1320 1330 1340 1350 1360  
 1370 1380 1390 1400 1410 1420 1430  
 TATATGSCCTPATCCAAAAGTGGGAAAGTAAAGTCTGACAGGEGTTCCACATAGCTGTT  
 TATATGSCCTPATCCAAAAGTGGGAAAGTAAAGTCTGACAGGEGTTCCACATAGCTGTT  
 1370 1380 1390 1400 1410 1420 1430  
 1440 1450 1460 1470 1480 1490 1500  
 1510 1520 1530 1540 1550 1560 1570  
 1580 1590 1600 1610 1620 1630 1640  
 1650 1660 1670 1680 1690 1700 1710  
 1690 1700 1710 1720 1730 1740 1750  
 1760 1770 1780 1790 1800 1810 1820  
 1830 1840 1850 1860 1870 1880 1890  
 1890 1900 1910 1920 1930 1940 1950  
 1950 1960 1970 1980 1990 2000 2010  
 1960 1970 1980 1990 2000 2010 2020  
 1970 1980 1990 2000 2010 2020 2030  
 1980 1990 2000 2010 2020 2030 2040  
 1990 2000 2010 2020 2030 2040 2050  
 2000 2010 2020 2030 2040 2050 2060  
 2010 2020 2030 2040 2050 2060 2070  
 2020 2030 2040 2050 2060 2070 2080  
 2030 2040 2050 2060 2070 2080 2090  
 2040 2050 2060 2070 2080 2090 2100  
 2050 2060 2070 2080 2090 2100 2110  
 2060 2070 2080 2090 2100 2110 2120  
 2070 2080 2090 2100 2110 2120 2130  
 2080 2090 2100 2110 2120 2130 2140  
 2090 2100 2110 2120 2130 2140 2150  
 2100 2110 2120 2130 2140 2150 2160  
 2110 2120 2130 2140 2150 2160 2170  
 2120 2130 2140 2150 2160 2170 2180  
 2130 2140 2150 2160 2170 2180 2190  
 2140 2150 2160 2170 2180 2190 2200  
 2150 2160 2170 2180 2190 2200 2210  
 2160 2170 2180 2190 2200 2210 2220  
 2170 2180 2190 2200 2210 2220 2230  
 2180 2190 2200 2210 2220 2230 2240  
 2190 2200 2210 2220 2230 2240 2250  
 2200 2210 2220 2230 2240 2250 2260  
 2210 2220 2230 2240 2250 2260 2270  
 2220 2230 2240 2250 2260 2270 2280  
 2230 2240 2250 2260 2270 2280 2290  
 2240 2250 2260 2270 2280 2290 2300

2 200 2210 X  
CAAAAABAAAAAA  
CAAAAABAAAAGAAGAAAGAAAGACTCCCTTAGAATCGGAAGAAATACTATAAA  
2310 2330 2350 2360

2. US-10-006-130A-129 (1-2213)  
US-09-205-258-20 Sequence 200, Application US/09205258

Initial Score	Optimized Score	Significance
998	1638	10.67
Residue Identity	Matches	
Gaps	2	0
	Conservative Substitutions	

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X 10 20 30 40 50
GAGCGAAACATGGCAGGGCGTTGGCSESTTTCGCGTCTCTGACCATGCGTGT
GCGGCTGCATCGTTGGCAGCTTCCCCTCAGCTCNSCCCAAGAACAGAACGACATGCGTGT
GCGCTGCATCCTTGACCTCCCTCAGCTCNSCCCAAGAACAGAACGACATGCGTGT
80 90 100 110 120
110 120 130 140
130 140 150 160 170 180 190
GGTTAGTCGCTGATGGACTAACAGAACCTGTTAATAGAATGCGAACAGTCGCGCT
GGTTAGTCGCTGATGGAAATGGACTAACAGAACCTGTTAATAGAATGCGAACAGTCGCGCT
150 160 170 180 190 200 210
220 230 240 250 260 270
200 210 220 230 240 250 260
TGCGAAAGGCCAACGAGAAATTCTCGTTATGCTGCTCTCCAGCATGACAGCTGCT
TGCGAAAGGCCAACGAGAAATTCTCGTTATGCTGCTCTCCAGCATGACAGCTGCT
220 230 240 250 260 270 280
280 290 300 310 320 330 340
CGTTTGCAGCAAGCTGATGGAAAGATTCCAGATCTGGGATCTCCAGCATGACAA
CGTTTGCAGCAAGCTGATGGAAAGATTCCAGATCTGGGATCTCCAGCATGACAA
290 300 310 320 330 340 350
350 360 370 380 390 400 410
CAGGATATTTCCTGCATGGGATTTGAGGGCTGTGATTTAGTCTGAAACATGAACTCAGC
CAGGATATTTCCTGCATGGGATTTGAGGGCTGTGATTTAGTCTGAAACATGAACTCAGC
370 380 390 400 410 420 430
420 430 440 450 460 470 480
TCCAACCTTCATCAACTTCTCGCAAGCTGATGGGATCTCCAGCATGACAGCCCC
TCCAACCTTCATCAACTTCTCGCAAGCTGATGGGATCTCCAGCATGACAGCCCC
440 450 460 470 480 490 500
560 570 580 590 600 610 620
640 650 660 670 680 690 700
AAATTATGGATTCTCTTAAACTGATGGCCTTGTGAGTCTGATGGACTTGTGATCTG
AAATTATGGATTCTCTTAAACTGATGGCCTTGTGAGTCTGATGGACTTGTGATCTG
580 590 600 610 620 630 640
510 520 530 540 550 560 570
560 570 580 590 600 610 620
630
700
710
720 730 740 750 760 770 780 790
710 720 730 740 750 760 770 780 790
780 790 800 810 820 830 840
TATCCATGGAAACGCACTTTCAGTGAACACATGCTTTAGTGAACACATGCTTTAATGGTGGAGTTAC
TATCCATGGAAACGCACTTTCAGTGAACACATGCTTTAGTGAACACATGCTTTAATGGTGGAGTTAC
720 730 740 750 760 770 780 790
850 860 870 880 890 900 910
CTTAGAATGGCTTGTGCTTATGAACTGCTTGTGCTTATGAACTGCTTGTGCTTATGAACTGCTTGTGCTT
CTTAGAATGGCTTGTGCTTATGAACTGCTTGTGCTTATGAACTGCTTGTGCTTATGAACTGCTTGTGCTT
870 880 890 900 910 920 930
920 930 940 950 960 970 980 990
CCCATACAGCTTCTGATGAGTTGATTCTTCAGTGGATGCTCTTGTGATTAATCTGGCTA
CCCATACAGCTTCTGATGAGTTGAAAGGTCTTGTGCTTATGACATGGAAATTTAGCTATGGCTA
940 950 960 970 980 990 1000
1000 1010 1020 1030 1040 1050 1060 1070
1070 1080 1090 1100 1110 1120 1130
1140 1150 1160 1170 1180 1190 1200 1210
1160 1170 1180 1190 1200 1210 1220
1080 1090 1100 1110 1120 1130 1140 1150
1210 1220 1230 1240 1250 1260 1270
1230 1240 1250 1260 1270 1280 1290 1300
1280 1290 1300 1310 1320 1330 1340 1350
1300 1310 1320 1330 1340 1350 1360 1370
1370 1380 1390 1400 1410 1420 1430 1440
1430 1440 1450 1460 1470 1480 1490 1500
1500 1510 1520 1530 1540 1550 1560 1570
1520 1530 1540 1550 1560 1570 1580 1590

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1570 1580 1590 1600 1610 1620 1630  
GCACAGCTAGCCCTCAAGACAGTGTTCCTCCCTCCTGCATATTCTGCGCTCCAGCTCG  
1590 1600 1610 1620 1630 1640 1650  
GCACAGCTAGCCCTCAAGACAGTGTTCCTCCCTCCTGCATATTCTGCGCTCCAGCTCG  
1640 1650 1660 1670 1680 1690 X 1700 1710  
AGTGATAGACTGAGACTCTCTCAAAGATACTCTAAATACAGGATTAAATTCTGCTTGAATAG  
1660 1670 1680 1690 1700 X  
TGCTATGATGGTTGGTTGGTTGGTTGGTTGGTTGGCT  
1720 1730 1740  
GTGTAACCTCTATTAGAAAGATTIC